

WHAT IS CLAIMED IS:

1. A method for retail check-out comprising the steps of:

establishing a communication link with a data storage unit in which a plurality of data records are stored, each of the plurality of data records corresponding to a respective one of a plurality of identifiers that was read by a portable data reading unit before the communication link was established;

inputting the plurality of data records from the data storage unit via the communication link established in the establishing step;

determining a price total for a plurality of items corresponding to the plurality of identifiers based on the plurality of data records inputted in the inputting step; and

accepting payment for the plurality of items based on the price total determined in the determining step,

wherein the step of accepting payment is performed using a customer-operated automated payment-accepting subsystem.

2. The method of claim 1, wherein the data storage unit is contained in the portable data reading unit.

3. The method of claim 1, wherein the data storage unit receives data from the portable data reading unit via an RF interface.

4. The method of claim 1, wherein the step of determining a price total comprises the steps of:

outputting signals to a POS controller in a format that mimics signals outputted by conventional POS scanning terminals after performing a check-out scan for each of the plurality of items; and

inputting price information generated by the POS controller in response to the signals outputted in the outputting step.

5. The method of claim 1, wherein the portable data reading unit comprises a barcode reader selected from the group consisting of: a flying spot scanner, an optical imaging reader, and a wand reader.

6. The method of claim 1, wherein the portable data reading unit comprises a radio frequency identification tag reader.

7. The method of claim 1, wherein the automated payment-accepting subsystem comprises at least one of a credit card transaction device, a debit card transaction device, and a cash-accepting device.

8. A method of retail shopping, comprising the steps of:

obtaining a portable reading unit;

selecting a set of desired items;

identifying each of the desired items using the portable reading unit during the selecting step;

linking, after completion of the selecting and identifying steps, the portable reading unit to a self-checkout station having a customer-operated automated payment-accepting subsystem;

waiting for a transfer, into the self-checkout station, of data identifying the set of desired items; and

paying for the set of desired items using the customer-operated automated payment-accepting subsystem.

9. The method of claim 8, wherein the data identifying the set of desired items is transferred into the self-checkout station from the portable reading unit.

10. The method of claim 8, wherein the data identifying the set of desired items is transferred into the self-checkout station from a base station that communicates with the portable reading unit.

11. The method of claim 8, wherein the desired items bear barcode symbols, and the step of identifying the desired items comprises reading the barcode symbols using the portable reading unit.

12. The method of claim 8, wherein the automated payment-accepting subsystem comprises at least one of a credit card transaction device, a debit card transaction device, and a cash-accepting device.

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13. The method of claim 8, wherein the step of linking comprises the step of placing the portable reading unit into a cradle on the self-checkout station.

14. The method of claim 8, wherein the obtaining step is performed in a first location, and the linking step is performed in a second location that is separated from the first location.

15. The method of claim 8, wherein the first location and the second location are separated by at least twenty feet.

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16. A self-checkout station comprising:  
a data input port that inputs a plurality of data records from a data storage unit;  
a first controller that determines a price for a plurality of items corresponding to the plurality of data records inputted via the data input port; and  
a customer-operated automated payment-acceptor that generates an output signal based on an amount of tendered payment,

wherein at least one of the first controller and the automated payment-acceptor generates an indication when a tendered payment is sufficient to pay the price determined by the first controller.

17. The self-checkout station of claim 16, wherein the data storage unit comprises a portable data reading unit.

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18. The self-checkout station of claim 17, wherein the portable data reading unit comprises a barcode reader selected from the group consisting of: a flying spot scanner, an optical imaging reader, and a wand reader.

19. The self-checkout station of claim 17, wherein the portable data reading unit comprises a radio frequency identification tag reader.

20. The self-checkout station of claim 16, wherein the data storage unit comprises a base station that communicates with a portable data reading unit.

21. The self-checkout station of claim 16, further comprising a interface with a second controller, wherein the first controller determines the price for the plurality of items by outputting signals to the second controller via the interface and inputting price information from the second controller via the interface.

22. The self-checkout station of claim 16, wherein the indication generated by the automated payment-acceptor is based on at least one of an amount of cash received and a credit card authorization.

23. The self-checkout station of claim 16, further comprising a cradle, wherein a connection between the data input port and the data storage unit is established by docking a portable data reading unit in the cradle.

24. The self-checkout station of claim 16, wherein the automated payment-acceptor comprises at least one of a credit card transaction device, a debit card transaction device, and a cash-accepting device.

25. A customer-operated checkout system for items bearing identifiers, the system comprising:

a portable terminal including a data reader, a memory, and a data output port; and

a self-checkout station including a data input port and a customer-operated automated payment-accepting subsystem,

wherein the portable terminal identifies selected items using the data reader, stores information about the selected items in the memory, and sends the stored information to the self-checkout station via the data output port, and

wherein the self-checkout station receives the stored information from the portable terminal via the data input port and accepts payment from the customer for the selected items using the payment-accepting subsystem.

26. The system of claim 25, wherein the identifiers are barcodes, the data reader identifies the selected items by reading the barcodes, and the data reader comprises a barcode reader selected from the group consisting of: a flying spot scanner, an optical imaging reader, and a wand reader.

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27. The system of claim 25, wherein the identifiers are optical characters, and the data reader identifies the selected items by reading the optical characters.

28. The system of claim 25, wherein the identifiers are radio frequency identification tags, and the data reader identifies the selected items by reading the radio frequency identification tags.

29. The system of claim 25, further comprising a base station including a first RF data interface,

wherein the portable terminal further includes a second RF data interface, and

wherein the portable terminal requests a price from the base station, via the first and second RF interfaces, corresponding to each identifier read, and the base station provides a price to the portable terminal, via the first and second RF interfaces, in response to the price request.

30. The system of claim 25, wherein the memory of the portable terminal stores a price look-up table, and wherein total price for selected items is computed based on the price look-up table.

31. The system of claim 25, wherein the self-checkout station further includes an interface to a point-of-sale system.

32. The system of claim 25, wherein the payment-accepting subsystem comprises at least one of a credit card

transaction device, a debit card transaction device, and a cash-accepting device.

33. A customer-operated checkout system for items bearing identifiers, the system comprising:

a portable terminal including a data reader and a first RF interface, wherein the portable terminal identifies selected items using the data reader, and transmits information about the selected items via the first RF interface.

a base station including an second RF interface, a memory, and a data output port, wherein the base station receives the information about the selected items from the portable terminal via the second RF interface, stores the information in the memory, and outputs the information via the data output port; and

a self-checkout station including a data input port and a customer-operated automated payment-accepting subsystem, wherein the self-checkout station receives the stored information from the base station data output port via the data input port, and accepts payment from the customer for the selected items using the payment-accepting subsystem.

34. The system of claim 33, wherein the data reader identifies the selected items by reading barcodes, and the data reader comprises a barcode reader selected from the group consisting of: a flying spot scanner, an optical imaging reader, and a wand reader.

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35. The system of claim 33, wherein the data reader identifies the selected items by reading optical characters, and the data reader comprises an optical character recognition reader.

36. The system of claim 33, wherein the data reader identifies the selected items by reading radio frequency identification tags, and the data reader comprises a radio frequency identification tag reader.

37. The system of claim 33, wherein the base station memory stores a price look-up table, and wherein a total price for selected items is computed based on the price look-up table.

38. The system of claim 33, wherein the self-checkout station further includes an interface to a point-of-sale system.

39. The system of claim 33, wherein the payment-accepting subsystem comprises at least one of a credit card transaction device, a debit card transaction device, and a cash-accepting device.

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